

**IN THE CLAIMS:**

**Amend** claims 1, 4, 6, 8, 10 and 12 as indicated below:

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- A7
1. (Amended) A semiconductor photodetection device, comprising:
- a semiconductor substrate of a first conductivity type;
  - a photodetection layer formed on said semiconductor substrate;
  - a region of a second conductivity type opposite to said first conductivity type being formed in a part of said photodetection layer; and
  - an electrode applying an electric field to said photodetection layer via said region of said second conductivity type such that said electric field acts in a thickness direction of said photodetection layer,
- said photodetection layer comprising:
- a first semiconductor layer having a first thickness and accumulating therein a compressive strain and absorbing an optical radiation; and
  - a second semiconductor layer having a second thickness smaller than said first thickness and accumulating therein a tensile strain, said first semiconductor layer and said second semiconductor layer being stacked alternately and repeatedly in said photodetection layer,
- wherein said tensile strain in said second semiconductor layer has a magnitude larger than a magnitude of said compressive strain in said first semiconductor layer.
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- A8
4. (Amended) A semiconductor photodetection device as claimed in claim 1, wherein a sum of the second [thickness] thicknesses of said second semiconductor [layer] layers is smaller

A8  
Cont.

than a sum of the first and second thicknesses by a factor of  $(0.9 \times L^{1/4} \times \epsilon)$ , wherein  $\epsilon$  represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

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A9

6. (Amended) A semiconductor photodetection device as claimed in claim 5, wherein a sum of the second [thickness] thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of  $(0.9 \times L^{1/4} \times \epsilon)$ , wherein  $\epsilon$  represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of percent.

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A10

8. (Amended) A semiconductor photodetection device as claimed in claim 7, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of  $(0.9 \times L^{1/4} \times \epsilon)$ , wherein  $\epsilon$  represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

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A<sup>11</sup>

10. (Amended) A semiconductor photodetection device as claimed in claim 9, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of  $(0.9 \times L^{1/4} \times \epsilon)$ , wherein  $\epsilon$  represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

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A<sup>12</sup>

12. (Amended) A semiconductor photodetection device as claimed in claim 11, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of  $(0.9 \times L^{1/4} \times \epsilon)$ , wherein  $\epsilon$  represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

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